California College of Midwives
State chapter ~ American College of Community Midwives

Section Two-M

Guidelines for Assessing the Neonate

~ Profile of a healthy Neonate, Criteria for evaluating deviations from normal newborn physiology, transient conditions, extended observation and other management strategies

The following criteria and guidelines are provided to help distinguish between those serious neonatal conditions requiring immediate medicalization and less serious problems that are mild, transient and/or spontaneously resolving. Observation for at least 2 hours by the midwife or a trained assistant is appropriate for all newborns, longer if there is any concern about the baby's transition to a stable status.

A. Profile of a Healthy Neonate

A physically healthy newborn has no evidence of prematurity or congenital anomalies. Physiologic stability is established by the newborn's ability to maintain stable cardio-respiratory function and the ability to suckle, feed and maintain normal body temperature in an open environment. (AAP) Newborn stability is evidenced by established respirations, normal temperature, normal heart rate and appropriate sucking reflex in the infant.

1. Newborn exam within a few hours of birth should demonstrate a:

- Heart rate between 110 – 150 w/o heart murmurs or signs of circulatory insufficiency
- Lungs clear with a regular respiratory rate between 40 and 70 – w/o central or circumoral cyanosis, flaring of nares, persistent grunting, retracting of sternum or sea-saw breathing
- Abdomen soft w/o masses, 3 vessels in umbilical cord
- No signs of seizure activity or lethargy (inability to wake baby or trigger crying)
- Reasonable muscle tone (normal arm recoil as used in Dobowitz or Ballard Gestational Age Assessment)
- Ability to suckle or nurse

B. Serious Neonatal Problems:

Evaluation by a physician and/or hospital transfer is indicated in the event of an extremely difficult labor or birth with sequelae such as a significantly depressed baby or one who is ill or injured, a baby suffering from a significant congenital anomaly or any baby for whom the parents

are concerned and request hospital care. It's a good idea to honor the parents' intuition if they are very worried or have feelings of foreboding.

C. The Cluster Phenomenon – a large number of small discrepancies:

Be particularly watchful of babies with a cluster of several small or subtle abnormalities that would be of little concern if they were a *single isolated finding*. For example, TTN (transient tachypnea of the newborn) in a baby with *no* labor/birth-related risk factors, who is nursing well and for whom all others parameters WNR (within the normal range) is far less worrisome than a baby with a known risk factor (longer 2nd stage, shoulder dystocia, lower Apgars, or slow adaptation to extra-uterine life, etc) *and* also presents a cluster of mild abnormalities such as *slightly raised* respiratory rate, *slight* pallor, just *a bit* floppy, *mild* grunting *and* won't nurse.

Pulse oximetery would be useful equipment in these situations, to determine whether or not this cluster indicates falling or inadequate oxygenation. If unable to establish the wellbeing of the baby, pediatric evaluation will be necessary.

D. Transient Problems:

Midwives providing community-based maternity care sometimes find themselves caring for babies with transient problems of mild to moderate severity which have stabilized and are resolving and thus do not appear to warrant immediate medicalization. Other factors for consideration are remote or rural locations with long travel distances to appropriate medical services, those living in locations where the services of an experienced perinatologist are not available, families with no healthcare insurance or MediCal coverage or who decline prophylactic medical care for religious or philosophical reasons.

Examples of transient problems include mild to moderate episodes of bradycardia or tachycardia during labor followed by good recovery with continued normal FHT variability, the unexpected appearance of thick meconium at delivery, shoulder dystocia that required significant manipulations but resolved without sequelae, any baby requiring resuscitative procedures at birth *beyond* a few puffs of positive pressure ventilation. Prophylactic positive pressure ventilation (PPV) for a "slow starter" -- 6 or less assisted respirations during the first 30-40 seconds or blow-by O2 which can be discontinued in less than 30 minutes is generally associated with benign situations and is not cause for medicalization.

However many babies, even those *without* identifiable stressors can be mildly depressed at birth and may take up to an hour to "normalize" at an optimal level. Benign conditions which are stable or improving are accompanied by improving Apgars. During the first hour after the birth the midwife is continually present and actively observing the baby, noting color, vigor, respiratory and heart rate and ability to nurse. For this reason, more latitude can be taken during this period of intense observation. By the end of the first hour most healthy babies will have an Apgar of 9 or above and a normal newborn exam.

E. Extended Observation and/or Pediatric Evaluation:

Transient neonatal problems often require a longer observation period, additional neonatal monitoring and parental instructions. Recommendation of a pediatric evaluation may be appropriate. If parents choose not to have the baby examined by a physician, their informed consent/decline must be documented in the intrapartum chart.

If there is continuing concern over the wellbeing of the baby, the midwife or another qualified observer should watch the baby for the first 4 to 8 hours and transport the baby if it does not maintain an essentially normal profile with normal vital signs. Extended observation is particularly important at night when parents may be sleeping. Such observation can be provided by a parent or another adult familiar with infant behavior (grandmother, etc) who agrees to:

- remain awake and observe the baby
- can demonstrate their ability to count the baby's respiration and heart rate
- has been given very specific guidelines on what to watch for and when to call the midwife or medical care providers

If the baby is being observed by a family member, the midwife must remain available and should make a house call or check in by phone at regular interval or after the agreed period of time.